

Alaska

Mosquito and Biting Fly Pest Control

Supplemental Information



Category Ten

In general, applicators who apply pesticides to property other than their own, or act as a pesticide consultant must obtain certification from the Alaska Department of Environmental Conservation (ADEC) Pesticide Program. Applicators who apply restricted-use pesticides must also be certified.

All individuals who apply pesticides to control mosquitoes or biting flies must be certified by the ADEC in the Mosquito and Biting Fly Pest Control Category (Category Ten).

Chapter Three and Chapter Six of the Florida *Public-Health Pesticide Applicator Training Manual* contain the majority of information needed to successfully complete the written examination to obtain certification in Category Ten in Alaska. However, regulations and requirements are different in Alaska, as are environmental conditions. This supplemental manual provides additional information that is specific to Alaska.

You will also need to have a working knowledge of the information covered in the following documents and manuals:

- National Pesticide Applicator Certification Core Manual; and
- State of Alaska Pesticide Regulations in Title 18, Chapter 90 of the Alaska Administrative Code (18 AAC 90).

CALCULATIONS

Precise and accurate application is important for every pesticide application. Strong math skills, including the ability to calculate speed, volume, odd shaped areas, mixing ratios, rates of application, etc. will be necessary to successfully pass examination for this category.

PUBLIC NOTIFICATION AND POSTING

A public place is defined as plazas, parks, public sports fields, government offices or grounds (except those with restricted access), and common areas of apartment buildings or multi-family dwellings.

Before applying pesticides to any public place, applicators must first post written notice informing the public when pesticides will be applied, and how long they must remain out of the area.

Signs must meet the following requirements:

- posted at each access point,
- posted prior to application of pesticide,
- remain in place at least 24 hours, or the re-entry period specified on the label, whichever is longer,
- at least 8 ½ by 11 inches in size,
- located between three feet and four feet above the ground, except if posted outdoors on a stake, at least 12 inches off the ground,

- include information about the date and time of application, contact name and phone number, and how long public must remain out of the area.

Record of the application, including all information required on the sign, must be maintained for at least two years after application.

Public notification requirements do not apply to the use of anti-microbial pesticides, rodenticides in tamper resistant bait stations, or ready to use pastes, foams, or gels.

Regulations related to public notification and posting requirements may be found at Title 18, Chapter 90, Section 630 of the Alaska Administrative Code. Please review the specific details of these requirements in the Pesticide Regulations.

ALASKA RECORD KEEPING REQUIREMENTS

State regulations require certified applicators to keep detailed records of ALL commercial or contract pesticide applications. Records must be kept for a minimum of two years and must contain the following information for both restricted use pesticides (RUPs) and general use pesticides (GUPs):

- Name of applicator
- Date of application
- Pesticide product name
- EPA registration number
- Location/address of area treated
- Site (e.g. front yard, living room, etc.) or specific crop to which pesticide was applied
- Target pests
- Amount applied - rate, dilution, and total amount. (*Pounds released for fumigants*)
- *Fumigants only* - temperature and duration of exposure period

The following additional information must be recorded for all RUP applications:

- Name and address of customer where pesticide was applied
- Time of application
- Percentage of active ingredient
- Disposal information for excess container, pesticide, rinsate, including disposal method, date, location.

ALASKA PESTICIDE USE PERMIT REQUIREMENTS

By state law, an ADEC Pesticide Use Permit is required before you may apply pesticide under the following circumstances:

- To any state owned or leased right of way, regardless of the size of application area or the pesticide to be applied.
- To any state owned or leased land that is 1 acre or more in area.

- To any water body or wetlands, including creeks, drainages, streams, ponds, rivers and swamps, regardless of who owns the surrounding lands.
- To more than one property.
- Aerial application (by airplane or helicopter).

It is against the law to apply pesticides to water without a Pesticide Use Permit.

Regulations related to permit requirements may be found at 18 AAC 90, Sections 500-540. The permitting process is rigorous, and takes a minimum of 100 days to complete. Applicators should plan well in advance to ensure that a valid Pesticide Use Permit can be obtained for the planned pesticide application.

The permitting process requires detailed information about the specifics of the proposed pesticide use. Once all the required information is submitted, the application is opened to a public comment and review period, and may require a public hearing. Once the public review period is complete, ADEC will conduct a thorough review of the proposed project and determine whether or not to issue a Pesticide Use Permit. If a Permit is issued, it does not become valid until after a 40 day waiting period, to allow time for the public to appeal the decision.

Pesticide use often raises concern in local communities, and may become contentious. Public resistance to the proposed pesticide use may impact your ability to obtain a Pesticide Use Permit.

Failure to obtain a permit is a violation of state law, and can result in significant penalties under Alaska Statute 46.03.760. It is the responsibility of the pesticide applicator to ensure that all required permits and approvals are in place before applying pesticides.

FEDERAL NPDES PERMIT REQUIREMENTS

After April 9, 2011, a National Pollution Discharge Elimination System (NPDES) Permit from EPA will also be required before a pesticide may be applied to surface water. EPA has developed a general use NPDES permit for application of pesticides to surface waters. The NPDES permit must be obtained prior to applying for an ADEC Pesticide Use Permit. For more information, contact Dirk Helder with EPA Region 10 at helder.dirk@epa.gov, or (208) 378-5749.

PESTICIDE LABELING

As with all pesticides, state and federal law requires compliance with all label instructions. It is particularly important to ensure that any pesticides applied to water bodies are **specifically labeled for aquatic use**.

INFECTIOUS DISEASES CARRIED BY INSECTS IN ALASKA

Outside of tropical areas, mosquitoes carry relatively few viruses. The main mosquito-borne viruses prevalent in the United States are various types of encephalitis and West Nile Virus. Due

to a variety of factors such as environmental conditions and absence of specific mosquito carrier species, these viruses do not occur in Alaska.

Tularemia is present in Alaska, although it rarely presents any human health problems. Tularemia is a bacterial disease that causes flu-like symptoms and other problems, and can be fatal if untreated. It can occur in hares and other small mammals in Alaska, and is sometimes, although rarely, transmitted to humans or pets. It can be carried by black flies, biting midges, and deer flies.

Because few infectious diseases are transmitted through insect vectors in Alaska, mosquito and biting fly control is implemented primarily to reduce nuisance insect populations.

COMMON BITING INSECTS IN ALASKA

Mosquitoes

Alaska is host to approximately 35 different species of mosquito. The most common mosquitoes belong to the genus *Aedes*. Mosquitoes of the genus *Culiseta* are also present, and are often the first to emerge in spring. Additional information on mosquitoes is provided in Chapter Six of the Florida manual.

Black Flies

Alaskan black flies are in the *Simulid* family. They are also called buffalo gnats or white sox after the white stripes on their legs. These insects crawl under clothing or near the hairline to bite the skin, and may cause a itching, swollen bump that persists for over a week. Additional information on black flies is provided in Chapter Three of the Florida manual.

Biting Midges

Biting midges are also called no-see-ums, punkies, or sand flies. These tiny flies are small enough to go through the mesh on head nets and tent screens, and can cause a painful bite. Additional information on biting midges is provided in Chapter Three of the Florida manual.

Deer flies

Deer flies are large flies with broad heads and bulging, often brightly colored eyes. Their flight may be silent, and their bite is painful. Additional information on deer flies is provided in Chapter Three of the Florida manual.

PORTIONS OF THE FLORIDA MANUAL TO DISREGARD

Florida states rules, requirements, and regulations cited in the Florida manual do not apply in Alaska, and should be disregarded. Use of pesticides in Alaska is regulated under 18 AAC 90.

You may also disregard the following sections or pages of the Florida manuals, as they do not apply in Alaska:

- **Chapter Three;** Pages 3-11 through 3-13, including sections on *Arbovirus Surveillance in Vertebrate Hosts*, *Vertebrate Host Collection*, *Blood collection*, and *Arbovirus*

Surveillance in Mosquitoes. These techniques are used to combat mosquito-borne viruses, which do not occur in Alaska.

- **Chapter Six;** Pages 6-2 through 6-6, including the section on *Filth Breeding Flies*. This type of fly is not relevant to Category Ten certification.

Before Using Any Pesticide

STOP

**All pesticides can be harmful to health
and environment if misused.**

**Read the label
carefully. Use only
as directed.**